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TECHNICAL DESCRIPTION

LD1.182.015 TO/s

(TEKHNICHESKOYE OPISANIYE)

(Chapters I, II, III, IV)

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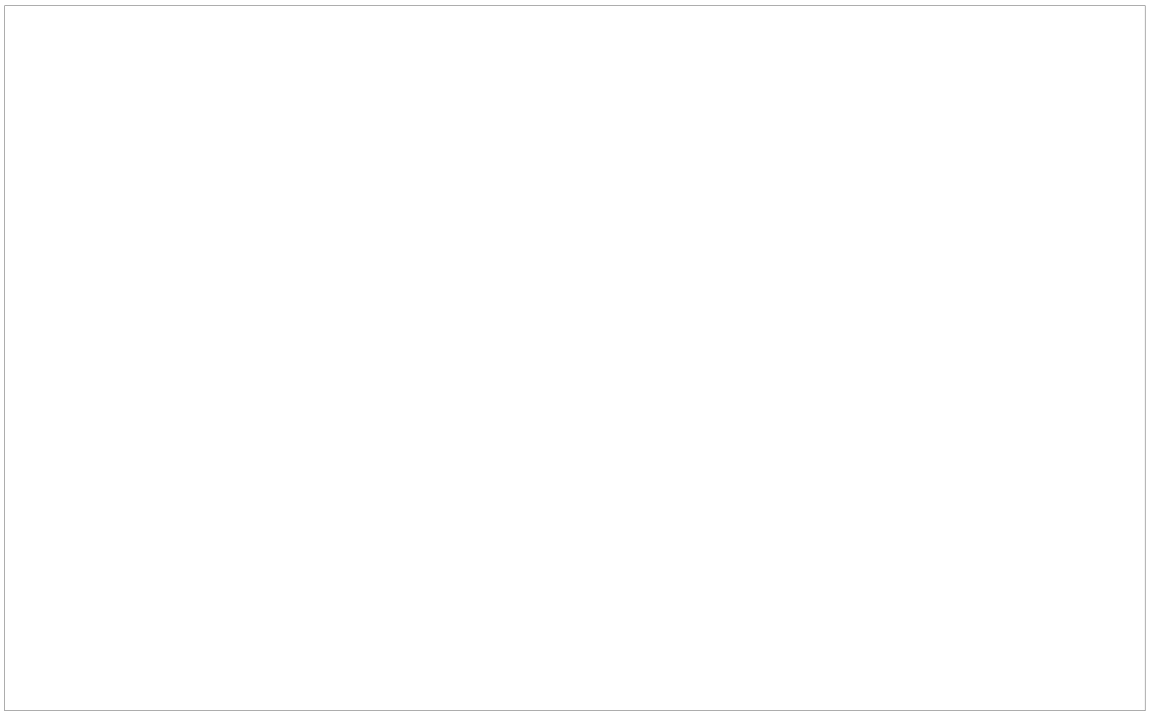

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5

DESIGNATIONS OF DEVICES, UNITS, AND MECHANISMS

- Device No 1 ANTENNA
  - P Head = TARGET SEARCH HEAD
  - S Head = TARGET TRACK HEAD
  - KU Drive = RELATIVE BEARING DRIVE
  - UM Drive = ELEVATION DRIVE
  - VTUM Unit = ELEVATION DRIVE ROTARY TRANSFORMER
  - TKhB Mechanism = BORESIGHTING MECHANISM
  - KYu Sensor = ANTENNA-ALIGNMENT-TESTING SENSOR

- Device No 2 TRANSCEIVER
  - VCh Unit = RF Unit
  - PUPCh Unit = IF PREAMPLIFIER
  - AIS Unit = AUTOMATIC RETUNING UNIT
  - AICh Unit = AUTOMATIC KLYSTRON TUNING UNIT
  - VChP Unit = WAVEGUIDE SECTION
  - EA Unit = DUMMY ANTENNA
  - IPM Unit = TRANSIENT OUTPUT POWER TESTER
  - Z Unit = PROTECTIVE UNIT
  - DNO Unit = BIDIRECTIONAL COUPLER
  - PK Mechanism = KLYSTRON RETUNING
  - PM Mechanism = MAGNETRON RETUNING MECHANISM

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KM Unit = COMMUTATION UNIT

UZLZ Unit = ULTRASONIC DELAY LINE

1-3 Unit = POWER SUPPLY

M Unit = MODULATOR

PM Unit = SPEECH AMPLIFIER

OM-1 Unit = 1st OUTPUT MODULATOR

OM-2 Unit = 2d OUTPUT MODULATOR

VPGSh Unit = NOISE GENERATOR WAVEGUIDE SWITCH

Device No 3 CENTRAL DEVICE

I Unit = DISPLAY AND CONTROL UNIT

UPCh Unit = IF AMPLIFIER

D Amplifier = RANGE DRIVE AMPLIFIER

D Mechanism = RANGE MECHANISM

KO Amplifier = CIRCULAR SCAN DRIVE AMPLIFIER

KO Mechanism = CIRCULAR SCAN MECHANISM

P Mechanism = DF MECHANISM

UM Mechanism = ELEVATION MECHANISM

Ks Mechanism = SHIP'S HEADING MECHANISM

V-5 Unit = 5-KV RECTIFIER UNIT

UMs Unit = STABILIZED ELEVATION UNIT

RBK Unit = ROLL REPEATER UNIT

SP - 5 AMPLIFIER } SERVO AMPLIFIERS

SP-6 AMPLIFIER }

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СП-7 - SI-7 Amplifier
СП-7М - SI-7M Amplifier
СП-8 - SI-8 Amplifier
} SERVO AMPLIFIERS

КУС - KUs Unit = STABILIZED RELATIVE BEARING UNIT

РКС - RKs Unit = SHIP'S HEADING REPEATER UNIT

РКК - RKK Unit = PITCH REPEATER UNIT

Device No 4 COMPUTER ELECTRONICS

УИ Unit = AMPLIFIERS, ANTENNA DRIVES

АУ Unit = AUTOMATIC ANGLE TRACKING UNIT

СВС-1 Unit = VELOCITY VECTOR COMPONENTS PROCESSOR

СВС-2 Unit = VELOCITY VECTOR COMPONENTS PROCESSOR

СВС-3 Unit = VELOCITY VECTOR COMPONENTS PROCESSOR

ДСУ - DSU Unit = ELEMENTS OF THE DIFFERENTIAL SMOOTHING DEVICE

ЛМВ - LMV Unit = LINEAR VIBRATION MODULATOR

ЛВ - LV Unit = LINEAR RECTIFIER UNIT

УПТВ - UPTV Unit = VIBRATION DC AMPLIFIER UNIT

И-1 - I-1 Unit = COMPUTER ELECTRONICS POWER SUPPLY

УИН - UIN Unit = AC VOLTAGE AMPLIFIER UNIT

Device No 5 CENTRAL AIMING DEVICE

УЦзН - UTsN Unit = CENTRAL AIMING AMPLIFIERS

П Mechanism = CORRECTION MECHANISM

ВП Mechanism = ERROR PROCESSING MECHANISM

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FULL DEFLECTION OR
IUGE Unit = TRAINING ANGLE UNIT (azimuth)

IUVN Unit = ELEVATION ANGLE UNIT

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Device No 5A PARALLAXER

U Unit = AMPLIFIERS

V Unit = RECTIFIERS

IUGF-A Unit = FULL DEFLECTION ANGLE UNIT (AZIMUTH)
CORRECTION TAKEN INTO ACCOUNT

IUVN-A Unit = FULL ELEVATION ANGLE UNIT (ELEVATION)
CORRECTION TAKEN INTO ACCOUNT

Device No 6 PEDESTAL SIGHT

Device No 7 TARGET SIMULATOR (SPEED)

ID Mechanism = INITIAL DATA (DISTANCE)

D Unit = RANGE UNIT

VU Unit = RECTIFIERS AND AMPLIFIERS

STs Unit = TARGET-SIGNALS UNIT

KYu Assembly = ADJUSTMENT-TESTING ASSEMBLY

Device No 8 SECONDARY VOLTAGE TRANSFORMER

FI Unit = CASCADE CIRCUIT FEED FILTER

Device No 8A RECTIFIER

V-1 Unit
V-2 Unit
V-3 Unit
V-4 Unit
} RECTIFIERS

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- Device No 9 DISTRIBUTION BOX

- Device No 10 CENTRAL AZIMUTH GYRO AND GYROHORIZON

- Mechanism No 1 = AZIMUTH GYRO

- Mechanism No 2 = GYROHORIZON

- Device No 11 AZIMUTH GYRO AMPLIFIERS

- UPT-2 Unit = DC AMPLIFIER

- Device No 12 AZIMUTH GYRO CONTROL PANEL
(Control and Monitoring Panel - Figure 16)

- Device No 13 STARTER

- SYa-PP = CENTRAL STATION JUNCTION BOX

- Device No 34 FOOT ACTUATED SWITCH

- TLF-24 = BUZZER

- EMU-12F = ELECTRIC MOTOR AMPLIFIER

- EMU-12A = ELECTRIC MOTOR AMPLIFIER

- PP-1125 = MAGNETIC STARTER

- PP-1211 = MAGNETIC STARTER

AIT-12-400BZ (400CB?) = MOTOR GENERATOR SET (CONVERTER)

- ATT-12-400VZ (400V3?) = MOTOR GENERATOR SET (CONVERTER)

- PRN-14ZT = VOLTAGE REGULATOR

- PP4559 = SINGLE LINE STARTER

- PMN-2112 = SINGLE LINE STARTER
- PMM-3112 = SINGLE LINE STARTER

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- KU-122-2MU = PUSHBUTTON CONTROL

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[illegible] -	TsP	=	CENTRAL STATION
[illegible] -	KYa	=	TERMINAL BOX
[illegible] -	TsU	=	TARGET INDICATION
[illegible] -	RRU	=	MANUAL GAIN CONTROL
[illegible] -	ARU	=	AUTOMATIC GAIN CONTROL
[illegible] -	VRU	=	DELAYED AUTOMATIC GAIN CONTROL
[illegible] -	APS	=	AUTOMATIC SYSTEM RETUNE
[illegible] -	HO-1	=	TYPES OF WAVES IN WAVEGUIDE
[illegible] -	HO-2		
γ -			PROPAGATION CONSTANT
[illegible] -	KBV	=	TRAVELING WAVE COEFFICIENT
[illegible] -	KSV	=	STANDING WAVE COEFFICIENT
[illegible] -	VT	=	ROTARY TRANSFORMER
[illegible] -	SKVT	=	SINE-COSINE ROTARY TRANSFORMER
[illegible] -	LVT	=	LINEAR ROTARY TRANSFORMER
[illegible] -	MVT	=	SCALING ROTARY TRANSFORMER
[illegible] -	UM	=	ELEVATION
[illegible] -	KU	=	RELATIVE BEARING
[illegible] -	TO	=	FINE READING
[illegible] -	GO	=	COARSE READING
[illegible] -	t.d.	=	MIL
[illegible] -	IO	=	OPERATOR'S DISPLAY
[illegible] -	IUO	=	FIRE CONTROL DISPLAY

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[illegible] -	UO	=	CONTROL FIRE

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[illegible]	KK	=	PITCHING
[illegible]	VK	=	ROLLING
[illegible] -	SRCh	=	COMPUTER SECTION
[illegible] -	RLS	=	RADAR
[illegible] -	PUS	=	FIRE DIRECTOR
[illegible] -	GAG	=	AZIMUTH GYRO AND GYRO HORIZON
[illegible] -	VK	=	SIGHT HEAD
[illegible] -	AU	=	GUN MOUNT
[illegible] -	AI	=	ANTENNA STATION
[illegible] -	VP	=	ROTATING JOINT
[illegible] -	TsS	=	FIRING CIRCUIT
[illegible] -	EKV	=	ELECTRIC PRIMER
[illegible] -	FLB	=	ELECTRIC FIRING PIN
[illegible] -	EK	=	ELECTRIC AIR-BLAST SWITCH
[illegible] -	AZS	=	AUTOMATIC CIRCUIT BREAKERS
[illegible] -	ROP	=	FIELD INTERRUPTING RELAY
[illegible] -	DZP	=	REAR ASPECT SENSOR
[illegible] -	ND	=	NULL SENSORS
[illegible] -	VN	=	POINTING
[illegible] -	GN	=	TRAINING
[illegible] -	KO	=	CIRCULAR SCAN
[illegible] -	P	=	DF
[illegible] -	Z	=	DELAY

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Kab. art. = gunner's cable length = 183 m

Kab. shturn. = helmsman's cable length = 185 m

PK = COORDINATES CONVERTER

PK I = STABILIZED TO UNSTABILIZED COORDINATES CONVERTER

PK II = UNSTABILIZED TO STABILIZED COORDINATES CONVERTER

SVO = ERROR DISCRIMINATION CIRCUIT

BV = BALLISTIC VALUE

SVS = VELOCITY VECTOR COMPONENT

VL = SIGHTING BEAM, i.e., direction determined by position of the KUs (stabilized relative bearing) and UMs (stabilized elevation) mechanisms

q_c - SHIP'S STABILIZED RELATIVE BEARING

$\mathcal{E}$ - STABILIZED TARGET ELEVATION

q_{HC} - SHIP'S UNSTABILIZED RELATIVE BEARING

$\mathcal{E}_{HC}$ - UNSTABILIZED TARGET ELEVATION

θ - ANGLE OF ROLL MEASURED IN PLANE OF SHIP'S RIBS

11 ψ - PITCH ANGLE MEASURED IN THE PLANE FORE AND AFT PERPENDICULAR TO THE HORIZON

G_c - SHIP'S HEADING

T_θ - ROLLING PERIOD

T_ψ - PITCHING PERIOD

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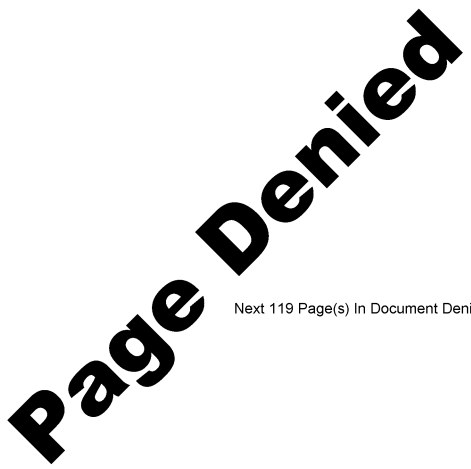

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